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VALVULAR HEART DISEASE

CLINICAL CHARACTERISTICS OF AORTIC DISSECTION IN BICUSPID AORTIC VALVE DISEASE; PRELIMINARY DATA FROM THE GENTAC REGISTRY

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

Monday, April 04, 2011, 9:30 a.m.-10:45 a.m.

Session Title: Valvular Disease- Defining Valvular Heart Disease- Epidemiologic Criteria

Abstract Category: 19. Valvular Disease

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Background: Bicuspid aortic valve (BAV) is the most common adult congenital abnormality and is seen in 1-2% of the population. These patients (pts) often have an associated aortopathy which increases their risk of aortic complications such as dissection (AoD). Identification of factors associated with risk of AoD is important in BAV pt management. We sought to address the hypothesis that pts with BAV and AoD have identifiable characteristics that predispose them to AoD.

Methods: The GENTAC registry was queried for all patients with BAV. Those with AoD and BAV (+AoD) were compared to BAV pts without AoD (-AoD). Demographic, clinical, imaging and genetic data were assessed for differences between the 2 groups. No BAV pts were excluded.

Results: Overall, 579 pts with BAV were assessed; mean age of 44.8±19.6 years (yrs) and 75.5% male. The 25 (4.3%) +AoD pts were older than -AoD pts (52.7±11.6 yrs vs. 44.4±19.9 yrs, p=0.003). Gender distribution was similar between groups (72.0% male in +AoD vs. 75.7% male in -AoD). All +AoD pts were identified after AoD had occurred. Surgery was performed in 14 of 25 +AoD pts (52%) for complications related to AoD. When identified, the site of the primary tear was in the root or ascending aorta. Identified family history of BAV or AoD was not different between groups (3/25 pts (12%) with +AoD vs. 51/524 (11.8%) of -AoD pts, p=1.0). Aortic insufficiency severity was most often mild and not different between groups. Sinus of Valsalva measurements were not different between groups (3.6±0.9cm in +AoD vs. 4.3±2.0cm in -AoD, p=0.20).

Conclusions: In pts with BAV, + AoD had a tendency to be older than -AoD pts. Otherwise these groups were similar in regard to clinical, imaging or genetic variables. Individual risk assessment for AoD in pts with BAV requires further study.